

Appl. No. 10/807,042
Amtd. dated April 12, 2005
Reply to Office Action of January 13, 2005

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A single transceiver system for utilizing a plurality of different communication standards, comprising:
a single transceiver selectably configurable to a plurality of different communication standards; and
a memory configured to store information received by the single transceiver utilizing a first communication standard, and configured to provide the information to the single transceiver for transmission according to a second communication standard
~~wherein the single transceiver utilizes a plurality of different communication standards.~~
2. (Canceled)
3. (Currently Amended) The system as recited in claim 1~~2~~, wherein the single transceiver demodulates the received signals into information bits.
4. (Canceled)
5. (Currently Amended) The system as recited in claim 3, wherein the single transceiver re-modulates the information bits into signals utilizing a the second communication standard.
6. (Canceled)
7. (Currently Amended) The system as recited in claim 1, wherein the single transceiver utilizes the plurality of different communication standards by time multiplexing therebetween.
8. (Original) The system as recited in claim 1, wherein the single transceiver is coupled to an antenna sub-system capable of communicating utilizing the plurality of different communication standards.

Appl. No. 10/807,042
Amdt. dated April 12, 2005
Reply to Office Action of January 13, 2005

PATENT

9. (Original) The system as recited in claim 1, wherein the single transceiver is coupled to a plurality of baseband sub-systems each capable of processing one of the communication standards.

10. (Original) The system as recited in claim 9, wherein the baseband sub-systems are implemented utilizing a plurality of discrete processors.

11. (Original) The system as recited in claim 9, wherein the baseband sub-systems are implemented utilizing a single integrated processor.

12. (Original) The system as recited in claim 9, wherein at least one of a time and a duration of access to the single transceiver by the baseband sub-systems is tracked.

13. (Original) The system as recited in claim 12, wherein each of the baseband sub-systems access the single transceiver during assigned time intervals.

14. (Original) The system as recited in claim 9, wherein each of the baseband sub-systems share memory.

15. (Original) The system as recited in claim 9, wherein the baseband sub-systems optimize a frequency or duration of transmissions or receptions in order to at least one of minimize a radio utilization, minimize a spectrum utilization, maximize a link throughput, and optimize a system parameter.

16. (Original) The system as recited in claim 9, wherein the baseband sub-systems at least one of translate, code, and decode information bits so as to make the information bits compatible with the plurality of different communication standards.

17. (Original) A method for utilizing a single transceiver, comprising:
receiving signals utilizing a first standard;
demodulating the signals into information bits;
re-modulating the information bits into signals utilizing a second standard; and
transmitting the signals utilizing the second standard;
wherein the receiving and the transmitting are carried out utilizing a single transceiver.

18. (Cancelled)

19. (Canceled)

Appl. No. 10/807,042
Amdt. dated April 12, 2005
Reply to Office Action of January 13, 2005

PATENT

20. (New) A system, comprising:
a single transceiver configured to time division multiplex between a plurality of communication standards;
a memory;
a baseband processor coupled to the single transceiver and configured to process a signal received by the single transceiver during a first time period according to a first communication standard and store received information in the memory, and further configured to process the received information according to a second communication standard for transmission by the single transceiver during a second time period distinct from the first time period.

21. (New) The system of claim 20, wherein the baseband processor is further configured to configure the single transceiver for operation according to the first communication standard prior to the first time period and configure the single transceiver for operation according to the second communication standard prior to the second time period.

22. (New) The system of claim 20, wherein the baseband processor comprises a multiple standard baseband processor.

23. (New) The system of claim 20, wherein the baseband processor comprises:
a first baseband processor configured to operate in accordance with the first communication standard; and
a second baseband processor configured to operate in accordance with the second communication standard.

24. (New) The system of claim 20, wherein the baseband processor is further configured to process a signal received by the single transceiver during a third time period according to the first communication standard and store received information in the memory, and wherein the baseband processor processes the received information from the first and third time periods according to the second communication standard for transmission by the single transceiver during the second time period.

Appl. No. 10/807,042
Amdt. dated April 12, 2005
Reply to Office Action of January 13, 2005

PATENT

25. (New) The system of claim 20, wherein the first communication standard comprises a wireless telephone communication standard and the second communication standard comprises a communication standard selected from a list comprising a wireless LAN communication standard, a Bluetooth communication standard, and a HomeRF communication standard.

26. (New) The system of claim 20, wherein the baseband processor is further configured to process a signal received by the single transceiver during a third time period according to the second communication standard and store received information in the memory, and further configured to process the received information according to the first communication standard for transmission by the single transceiver during a fourth time period.